

end; said collars co operating to prevent the withdrawal of said inner tubular element from said outer tubular element when said tubular elements operate telescopically; said method comprising including the steps of: (a) exerting an axial load on the device to induce compression in the device; such that the device resists rotational movement of a forearm towards an upper arm of the same arm, said resistance force acting along the line between the shoulder and the wrist of a user;
(b) relaxing said axial load on said device so that said device restricts the angle at the elbow of said user to an angle about or less than 90 degrees;
(c) adjusting said device so that the resistance force is within the capacity of the user to overcome by the rotational movement of the forearm towards the upper arm; said adjustment being effected by means of springs of varying spring rate or by means of varying the installed length of a compression spring;
(d) repeated reciprocal rotational movements of the forearm towards the upper arm to exercise the arm of the user.

REMARKS

1. Applicant thanks the examiner for the office action and hopes that this response will explain the distinction between the now claimed invention and the cited art.

2 Applicant has amended claim 1- 26 as originally filed and has substituted new claims 27-53 which are amended from and based on the claims filed with the originating application.

3 It is submitted that the amended claims are fairly based on the specification as filed and do not introduce any new matter not disclosed in the original specification.

4 Applicant attaches a revised specification and drawings with amended numbering for figures 1 and 2.

REMARKS

Drawings

The drawings have been amended to remove numbering errors including missing reference numerals, as well as inconsistencies between that which is disclosed and referenced in the specification and the element referenced in the drawings.

Applicant has amended the specification to comply with amendment to the drawings so the drawings are consistent with the disclosure.

Claim Objections

The revised claims address the objection to claims 9 and 19 under 37 CFR 1.75 as being a substantial duplicate thereof. Similarly claim 10 (original) has been removed.

The following textural errors identified in the original claims have been corrected in the new claims - regarding claim 3, in line 4 the recitation '*tubular members*' is now tubular elements in order to be consistent with the preceding claim language; regarding claim 19, in line 4, 'th' is now the—; regarding claim 26, the preamble concludes with a semicolon instead of a colon, and the method begins with step (e) and recites steps (e)-(h) rather than beginning with step (a) and reciting steps (a)-(d). The new method claim identifies steps (a) – (e).

Claims 1-25 were rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the upper arm exercise device disclosed by Applicant and recited in claims 2-8, 10-18 and 20-25 does not in the examiner's view reasonably provide enablement for the multitude of devices for exercising the upper arm as recited in claims 1, 9 and 19. The claims have been amended to introduce limitations to the use and geometry of the device to address the above objections.

The exercise device claimed is now limited to a device held between a hand and upper arm of one arm and which may be squeezed as the users hand is drawn up to the upper arm against the bias of the device.

5 Claims 5-8 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is submitted that the revised claims address the objection raised against original Claim 5 with respect to the reference to spring rates.

Claim Rejections -35 USC § 102

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Claims 1-4, 9-17, 19-21 and 25 were rejected under 35 U.S.C. 102(b) as being anticipated by Miller (US Pat. No. 5,501,646). In response to this objection the revised claims now recite structure along with the intended use of the device.

15 Miller 5,501,646

This citation discloses a jaw and neck muscle exercise apparatus which includes a spring loaded support arm attached to a soft chin support on one end and to a chest plate on the other end. The chest plate is strapped around the chest bone/collar bone area and the back of the neck by a collar strap. The lower jaw may then be exercised by opening the mouth or lowering the entire head against the resistance of the spring. This device is for toning the face, chin and neck eliminating fatness below the chin and wrinkles. It is submitted that the Applicant's device as disclosed in the amended claims has the limitation that it is used for arm exercises and features limitations and structure which distinguish from the cited art. More specifically the Applicant's invention is limited to a device for the exercise of the musculature of the upper arm, having telescopically operating inner and outer tubular elements, each with end closure means at their outer ends and an inwardly projecting collar at its inward open end of the outer tubular element. The inner tubular element also has an outwardly projecting collar at its inward open end with the collars co operating to prevent the withdrawal of the inner tubular element from the outer tubular element when said tubular elements operate telescopically;

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The device now claimed provides a resistance force to rotational movement about the elbow of a forearm in a direction towards an upper arm of the same arm and it allows engagement of one end with a hand of a user and the other end with an upper part of the same arm such that the user can exercise one arm without use of the other arm. Whilst
5 there are some features in common between the two devices the use limitations and geometry of the Applicant's device which is for an entirely different exercise purpose and used in a different way. Miller does not teach an exercise device for use by one arm in exercising that arm. Since the dependent claims in the revised claim set are appended to the revised narrower claim 1 it is submitted when the appended claims are read with the
10 narrower independent claim that the Applicant's invention is distinguishable from the cited art.

Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Bennett et al. (US Pat. No. 6,245,034).

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Bennett discloses an exercise device for the arms that provides a resistance force to the rotational movement of the forearm towards the upper arm along the line between the shoulder and the wrist, and teaches adjusting the device so that when in a relaxed state the device restricts the angle at the elbow to about 90 degrees (note Figure 4), as well as
20 adjusting the device so that different resistance forces are applied via adjustment of a compression spring (column 3, lines 45-67 to column 4 lines 1-24).

It is submitted that the revised claims avoid the Bennett reference by the limitations of feature and mode of use in the narrowest Applicant claims.

25 Claim Rejections -35 USC § 103

Claims 5, 18, 22-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miller alone.

30 Examiner finds that Miller does not specifically disclose varying spring rates in the ranges of 11-15 lb/in and 17-21 lb/in However Miller does teach adjusting the

resistance provided by the spring and therefore a range of spring rates are permitted with the device. Examiner also finds that it would appear that the rates recited by the Applicant are capable of being performed with the Miller device. Miller does not teach the ranges of values referred to by the Applicant, nor does it teach a similar result to that of the Applicant's device. Regarding claim 18, Miller is silent with respect to the overall length of the device. Miller teaches the use of a chin cup (28), but in view of the further limitations in the revised claims it is submitted that the new claims recite structure that distinguishes the chin cup from a 'shoulder yoke'. Miller does not teach that Additionally, the chin cup can be abutted against the user's shoulder during use and in fact teaches against any use other than the intended use disclosed in Miller. Miller also provides a strap (22), but in view of the new claim limitations in the application it is submitted that the invention distinguishes the chin cup from a 'wrist yoke'. In view of that it is further submitted that it would not have been obvious to one having ordinary skill in the art at the time the invention was made to have changed the position of these elements and provided the chin cup/shoulder yoke at the tubular member and the strap/wrist yoke at the outer end of the piston rod.

In view of the forgoing the applicant believes that the claim as amended are in condition for allowance an outcome which is earnestly solicited.

Fees of US\$555 (small entity) for an Extension of time for three months are attached herewith along with form Petition for Extension of Time Under 37 CFR 1.136(a).

Respectfully Submitted.

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